



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Adress: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,666	05/07/2007	Katrin Scholz	SCHO3003/FJD	4554
23364	7590	06/28/2010	EXAMINER	
BACON & THOMAS, PLLC			LAZORCIK, JASON L	
625 SLATERS LANE			ART UNIT	PAPER NUMBER
FOURTH FLOOR				1791
ALEXANDRIA, VA 22314-1176				

MAIL DATE	DELIVERY MODE
06/28/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/581,666	<b>Applicant(s)</b> SCHOLZ ET AL.
	<b>Examiner</b> JASON L. LAZORCIK	<b>Art Unit</b> 1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 3/29/10.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 10-18 is/are pending in the application.

4a) Of the above claim(s) 18 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 10-17 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 05 June 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement (PTO-1448)  
 Paper No(s)/Mail Date 7/14/2009, 6/5/2006

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date: \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

Applicant's election without traverse of the invention of Group I, Claims 10-17, drawn to a method for the automatic manufacture of a glass body in the reply filed on March 29, 2010 is acknowledged.

Claim 18 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

***Status of the Claims***

Claims 1-9 stand as having been previously cancelled by Applicant, and pursuant to Applicants response dated March 29, 2010, claim 18 stands as withdrawn from consideration without traverse.

Therefore, Claims 10-17 are pending for prosecution on the merits.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11, 13, and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11, line 1-2 recites the limitation "the opening". There is insufficient antecedent basis for this limitation in the claim.

In claim 13 it is unclear what is meant by the limitation "forming a cone is formed..." as recited in line 3

In claim 15, it is not clear what Applicant intends by the limitation such that a tool "exhibits" a ceramic or carbon-fiber material

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelo (US 4,661,236).

With respect to independent claim 10 and with particular reference to the disclosed prior art method (see col. 2, line52-col.3, line 25) for manufacturing ion selective electrodes as depicted in Figures 2A-2D, Gelo teaches (see figure 2B)

Art Unit: 1791

preparing an outer glass tube(12b) and an inner glass tube (10) arranged coaxially and having a media side end in the region of the ion selective bulb as recited in claim 10, lines 3-7.

With reference to Figure 4a, Gelo teaches that a media side opening of the inner tube and media side edge of the inner tube (in the region of lead line 13) are formed upon preliminary joining of the inner and outer glass tubes (col. 3, lines 61-col.4, line 5) as recited in claim 10, lines 17-18.

Referring again to figures 2A-2D, Gelo teaches that according to the prior art known method for manufacturing the glass electrode (see figure 2A), a relatively long inner glass tube (10) is arranged coaxially with a relatively long outer glass tube (12). The relatively long outer glass tube is thereafter (see figure 2B) subdivided into an auxiliary glass tube (12a) and a remaining outer glass tube (12b) which is attached to the inner glass tube (10). The Examiner construes the instant step to read upon the recited step of removing a remainder of the auxiliary glass tube from the outer tube in accordance with claim 10, line 16

With reference to figures 2b and 2D, Gelo teaches that an auxiliary glass tube (12a) is arranged coaxially with the outer glass tube, that the auxiliary glass tube is brought into contiguous relationship with the outer glass tube (12b), and that said inner and outer glass tubes are fusion joined via heating means (26).

(I) Use of first and second spindles of a glass lathe are obvious over the Gelo disclosed process

Gelo teaches (see figure 50 that at least one lathe spindle (30,32) may be employed to support the glass electrode structure during the disclosed glass working steps. Gelo is silent regarding the supporting of the inner and outer tubes by a first spindle and the auxiliary glass tube by a second spindle.

Where figure 2B and 2D make plain that the outer tube and auxiliary glass tube are maintained in coaxial arrangement for the fusion bonding process and where Gelo makes plain that a lathe/spindle arrangement is known for supporting the glass subassembly during manufacture, one skilled in the art of glass manufacture would have found the use of first and second spindle arrangement as a merely trivial extension over the prior art disclosed method as a means to maintain a desired alignment between the outer glass tube and the auxiliary glass tube.

Regarding claim 11, Gelo teaches blowing a glass membrane on the formed media side edge of the opening (see col. 3, ine61-col4, line5)

With respect to claim 12, bulb (14) is construed to constitute a radial widening on the media side end of the inner glass tube

With respect to claim 13, Gelo teaches forming a cone (see the region of lead line 13 in figure 4A) prior to the step of removing the auxiliary glass remainder from the outer tube.

With respect to claim 14, see Gelo col. 3, line61 to col.4, line 5

Regarding claim 15, Gelo is silent regarding the materials of construction of the glass forming tools or that they "exhibit a ceramic or carbon-fiber material" however said materials were widely employed to the construction of glass forming tools at the time of the invention. It follows that the use of ceramics and or carbon fiber based tools would have constituted a merely obvious extension over the prior art disclosed process for a skilled technician at the time of the invention.

Regarding claim 16, automation of the membrane blowing operation and specifically use of a video control loop to monitor such a process would have been construed as an obvious advance over the prior art disclosed process for one skilled in the art of process automation.

Regarding claim 17, see Gelo col. 3, line61 to col.4, line 5

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is advised to carefully review the cited references which concern manufacture of glass ion-selective electrode devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON L. LAZORCIK whose telephone number is (571)272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason L Lazorcik/  
Primary Examiner, Art Unit 1791